Nancy McKinley Lecture Series:
Developing Language in Elementary Students: What’s New?

In Cooperation with the University of Wisconsin-Eau Claire

Presenter: Carol Westby, Ph.D., CCC-SLP

Moderated by: Amy Hansen, M.A., CCC-SLP, Managing Editor, SpeechPathology.com

Informational Discourse: Teaching the Main Course of Schooling

Presenter: Carol Westby, Ph.D., CCC-SLP

Guest editor: Linda R. Schreiber, M.S., CCC-SLP, BRS-CL

Moderated by: Amy Hansen, M.A., CCC-SLP, Managing Editor, SpeechPathology.com
SpeechPathology.com Expert eSeminar

Need assistance or technical support during event?
Please contact SpeechPathology.com at 800-242-5183

Earning CEUs

• Log in to your account and go to Pending Courses under the CEU Courses tab.

• Must pass 10-question multiple-choice exam with a score of 80% or higher

• Two opportunities to pass the exam
Earn academic credit through
University of Wisconsin-Eau Claire

Undergraduate Tuition: $375 per 1-credit course
Graduate Tuition: $575 per 1-credit course
Course materials available through your SpeechPathology.com membership

Choose from 7 courses:
1. Current Issues in Childhood Apraxia of Speech
2. Autism Spectrum Disorders and Asperger Syndrome in Young Children
3. Autism Spectrum Disorders and Asperger Syndrome in Elementary-Aged Children
4. Autism Spectrum Disorders and Asperger Syndrome in Adolescents and Young Adults
5. Intervention Ideas for Children 10 Years +
6. Communication Disorders and Multicultural Issues
7. Developing Language in Elementary Students

www.uwec.edu/CE/programs/mckinley.htm

Peer Review Process

Interested in Becoming a Peer Reviewer?

APPLY TODAY!

• 3+ years SLP Professional Experience Required

• Contact Amy Natho at anatho@speechpathology.com
Informational Discourse:

Teaching the Main Course of Schooling

Carol Westby, PhD, CCC-SLP
Bilingual Multicultural Services, Albuquerque, NM
Brigham Young University, Provo, Utah

Disclosure
I have no relevant financial or nonfinancial relationships in the products or services described, reviewed, evaluated or compared in this presentation.
Characteristics of Informational Discourse

• Decontextualized demands
  – Unfamiliar and removed from contextualized familiar experiences

Unfamiliar Content

• By 1849 Harriet was sure she would soon be sold to another owner far away—and farther away from the North. Harriet knew she had to leave before it was too late. …She got in touch with people who lived outside the plantation and could help her. She secretly made plans to escape. (Harriet Tubman: A Woman of Courage [Skelton, 2005]).

• Child must understand:
  – period of time
  – concepts such as owner (of persons), persons being sold, plantation, escape and implicit concepts of courage, secrecy, and an invisible network of support.
  – concepts associated with the “North” offering the possibility of freedom (i.e., understanding that plantations closer to the North shortened the journey to accomplish an escape).
Familiar and Unfamiliar Concepts

<table>
<thead>
<tr>
<th>What's Familiar?</th>
<th>What's Unfamiliar?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past and Present (Me, Too!)</td>
<td>Past Only (Not Me!)</td>
</tr>
<tr>
<td>• doing chores: washing dishes, taking care of younger children</td>
<td>• being taken away from parents</td>
</tr>
<tr>
<td>• some games were the same: jump rope, hide 'n seek</td>
<td>• being owned by someone</td>
</tr>
<tr>
<td>• doing things to help other people</td>
<td>• not having time to play</td>
</tr>
<tr>
<td>• sleeping, eating, singing songs</td>
<td>• not getting paid for working</td>
</tr>
<tr>
<td></td>
<td>• not being read to or tucked into bed</td>
</tr>
<tr>
<td></td>
<td>• not going to school and not being allowed to learn to read</td>
</tr>
<tr>
<td></td>
<td>• not having a family name; having to take the name of your owner</td>
</tr>
</tbody>
</table>


Characteristics of Informational Discourse

• Decontextualized demands
  – Higher order language
  • Analyze, evaluate, synthesize, persuade, predict, explain, compare, interpret, infer
Skyscraper Analogy for Stepping up Thinking

Creating: Based on what you have learned about ecological systems, develop a plan for what the city of Albuquerque could do to preserve the Bosque (the wooded area near the river).

Evaluating: A housing developer wants to buy a large section of the Bosque and build very expensive homes there. Write a letter to the editor of the newspaper about your opinion of this idea.

Analyzing: Compare and contrast the lives of plants and animals in a terrarium

Applying: Put worms and a variety of “garbage” into your terrarium. Record your observations over a week. Explain what you saw happen.

Understanding: Describe the procedures you used to put your terrarium together.

Remembering: Draw a picture of your terrarium.

Characteristics of Informational Discourse

- **Types of Vocabulary**
  - **General Academic**
    - Analyze, illustrate, justify, contrast
  - **Abstract**
    - Democracy, freedom
  - **Technical or domain specific**
    - Photosynthesis, vertebrate, denominator
  - **Connective words**
    - Yet, because, as a result, therefore, as a consequence, however
Some Words from:
Academic Word List: Sublist 1
http://www.victoria.ac.nz/lals/resources/academicwordlist/

- analyse
  - analysed
  - analyser
  - analysers
  - analyses
  - analysing
  - analysis
  - analyst
  - analysts
  - analytic
  - analytical
  - analyze
  - analyzed
  - analyzes
  - analyzing

- approach
  - approachable
  - approached
  - approaches
  - approaching
  - unapproachable

- define
  - definable
  - defined
  - defines
  - defining
  - definition
  - definitions
  - redefine
  - redefined
  - redefines
  - redefining
  - undefined

- context
  - contexts
  - contextual
  - contextualise
  - contextualised
  - contextualising
  - uncontextualised
  - contextualize
  - contextualized
  - contextualizing
  - uncontextualized

- contract
  - contracted
  - contracting
  - contractor
  - contractors
  - contracts

Some Words from:
Academic Word List Sublist 9

- accommodate
  - accommodated
  - accommodates
  - accommodating
  - accommodation

- analogy
  - analogies
  - analogous

- anticipate
  - anticipated
  - anticipates
  - anticipating
  - anticipation
  - unanticipated

- revolution
  - revolutionary
  - revolutionaries
  - revolutionize
  - revolutionized
  - revolutionizes
  - revolutionizing
  - revolutionist
  - revolutionists
  - revolutions

http://www.victoria.ac.nz/lals/resources/academicwordlist/
College Talk

• Use academic language
  – Instead of “You’re talking too much.”
    “You’re being too garrulous.”
  – Instead of “I have something important to tell you.”
    “I have an imperative announcement that is very critical for you.”

Vocabulary: College Talk

Video1
Vocabulary Paint Chips

Vocabulary: Paint Chips
Video 2
Vocabulary Development

• Of 10,000 unfamiliar words an American 5th grader will encounter in reading, 4,000 will be derivatives of more frequent words (Nagy, Osborn, Winsor, & O’Flahavan, 1994).

• Between 1st and 5th grades, the increase in number of derived words is over three times greater than the increase in number of root words (Anglin, 1993).

• Morphological awareness and reading proficiency are linked in the early school years, middle school, high school, and college (Carlisle, 2004).

Most Common Prefixes
Grades 3-4

un- pre-
re- inter-
in-, im-, ir, il-(not) fore-
dis- de-
en-, em- trans-
non- super-
in-, im- (in or into) semi-
over-(too much) anti-
mis- mid-
sub- under-
Most Common Prefixes
Grades 3-4

un-
re-
in-, im-, ir, il-(not)
dis-
en-, em-
non-
in-, im- (in into)
over-(too much) anti-
mis-
sub-

pre-
inter-
fore-
de-
trans-
super-
semi-
mid-
under-

Teaching Suffixes
-er Definitions and Examples

<table>
<thead>
<tr>
<th>“more” (comparative adjective)</th>
<th>“one who” (noun)</th>
<th>“that which” (noun)</th>
</tr>
</thead>
<tbody>
<tr>
<td>stronger</td>
<td>teacher</td>
<td>toaster</td>
</tr>
<tr>
<td>thicker</td>
<td>traveler</td>
<td>washer</td>
</tr>
<tr>
<td>Softer</td>
<td>Pitcher</td>
<td>Hanger</td>
</tr>
</tbody>
</table>

Morphology
Grade 5-6

- Greek and Latin word roots
  - Most common Greek roots: *tela* (far, distant); *therm* (heat); *photo* (light)
  - Move to Latin roots with aim to gain understanding of a few frequently occurring roots: *tract* (drag, pull); *spect* (look); *spect* (look); *port* (carry), *dict* (say), *rupt* (to break); *scrib* (to write)

- Greek and Latin prefixes
  - E.g., *inter-* (between); *intra-* (within); *post-* (after); *pro-* (in front of, forward); *co-.com-.con-* (together); *sub-* (under); *pre-* (before); *anti-* (against)

Bricks and Mortar

<table>
<thead>
<tr>
<th>Bricks (Content Specific)</th>
<th>Mortar (General Academic)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language Arts</td>
<td>Imagery, alliteration, theme, metaphor, plots</td>
</tr>
<tr>
<td>History</td>
<td>Revolution, emancipation, right, oligarchy</td>
</tr>
<tr>
<td>Math</td>
<td>Reciprocal, balance, proof, hypotenuse, obtuse, matrix</td>
</tr>
<tr>
<td>Science</td>
<td>Mitosis, gravity, force, sublimation, photosynthesis</td>
</tr>
</tbody>
</table>

### Terms Used in Building Academic Sentences

<table>
<thead>
<tr>
<th>To describe sequence</th>
<th>To give an example</th>
<th>To soften statement</th>
<th>To compare &amp; contrast</th>
<th>Show results/conclude</th>
</tr>
</thead>
<tbody>
<tr>
<td>First...second</td>
<td>For example</td>
<td>Sometimes</td>
<td>Whereas</td>
<td>This led to</td>
</tr>
<tr>
<td>At this time</td>
<td>For instance</td>
<td>Many</td>
<td>Nevertheless</td>
<td>Hence</td>
</tr>
<tr>
<td>At this point</td>
<td>Consider the time</td>
<td>Few</td>
<td>However</td>
<td>Brought about by</td>
</tr>
<tr>
<td>Meanwhile</td>
<td>In this case</td>
<td>Seldom</td>
<td>On the other hand</td>
<td>In conclusion</td>
</tr>
<tr>
<td>Finally</td>
<td>On this occasion</td>
<td>Rarely</td>
<td>On the contrary</td>
<td>As we have shown</td>
</tr>
<tr>
<td>Concurrently</td>
<td>In this situation</td>
<td>Can</td>
<td>By comparison</td>
<td>Therefore</td>
</tr>
<tr>
<td>Previously</td>
<td>To demonstrate</td>
<td>Might</td>
<td>Ironically</td>
<td>Accordingly</td>
</tr>
<tr>
<td>Simultaneously</td>
<td>To illustrate</td>
<td>Most</td>
<td>Yet</td>
<td>Thus</td>
</tr>
<tr>
<td>Concurrently</td>
<td>In fact</td>
<td>Occasionally</td>
<td>Compared to</td>
<td>As a result</td>
</tr>
<tr>
<td>While</td>
<td>...in practice</td>
<td>Theoretically</td>
<td>Although</td>
<td>Consequently</td>
</tr>
<tr>
<td>Following this</td>
<td>Such as</td>
<td>Probably</td>
<td>Even though</td>
<td>Ultimately</td>
</tr>
</tbody>
</table>

### Characteristics of Informational Discourse

- Lexical density: A measure of how much information is in a text -- the number of lexical words per clause. Lexical words are also known as content words or information words.
Lexical Density

• In conversation
  – I’m going to the store to get some shoes for the dance. (3)
  – We never really did anything much in science at school. (2)
  – My father used to tell me about the cows on his farm. (4)

• In informational discourse
  – Abolitionists organized an escape route to help runaway slaves. (6)
  – The British encouraged the Indians to attack the American settlers. (6)
  – The pioneers were searching for good soil and a mild climate. (5)

Characteristics of Informational Discourse

• Nominalization
  – Processes and sequences or time periods are turned into things
    • Pollute becomes pollution
    • Destroy becomes destruction
    • Migrate becomes migration
    • Revolt becomes revolution
  – Verbs and adjectives are made into nouns that become subjects or objects in clauses and sentences
    • Pollution of streams and lakes has caused the destruction of habitats and disruption in the migration of waterfowl.
  – Compacts information and creates high levels of abstraction
Nominalization

- The ideas that are argued in this narrative are hard to believe. The arguments are loose and unappealing. The looseness makes the author’s ideas difficult to follow. Their lack of appeal makes the document uninteresting.

  • The verb argued is nominalized to arguments
  • The adjectives loose and unappealing are nominalized to looseness and lack of appeal

Nominalization

• Enables something that has been presented in a series of clauses to be distilled into one nominal element. In science, nominalization can be used as a summary of an explanation sequence.

In the hot sun, the water evaporates, turning into a gas called water vapor. The water vapor rises. As it encounters cold air, the vapor condenses into droplets of liquid water, forming clouds. If the vapor is chilled enough, it condenses into ice crystals and falls as snow. This great unending circulation of the earth’s waters in called the water cycle.
Nominalization

- In history, may be used to develop a chain of reasoning that at the same time embeds interpretation and judgment
  - Toward the end of the 20th century senior workers, who had held jobs for a long time, thought they should have greater privileges than more recent hires. *Seniority* was often used as a criterion for job retention in times of restructuring and layoffs. The *expectation* of job security led to a lack of *innovation* as employers and entrepreneurs struggle with an aging workforce.


Unpack Nominalization

- The *condemnation* of dissenting *perspectives* led to the *revolution*
- The colonists *condemned* King George for unfair taxes. King George *condemned* the colonists for destroying tea. The king and the colonists *perceived* the situation differently. Because they *perceived* the situation differently, the colonists *revolted*. 
Syntactic Patterns: Dependent Clauses

- Adverbial
  - Birds such as falcons, eagles, hawks, owls, and vultures are called birds of prey because they eat other birds and small animals.

- Adjectival
  - DDT was sprayed on crops to kill the insects that ate them.

- Nominal
  - They (the ornithologists) saw that when a mother peregrine sat on her eggs to keep them warm, they broke.

---

Sentence Frames for Comparison

<table>
<thead>
<tr>
<th>Sentence frame with vocabulary underlined</th>
<th>Simple sentence</th>
<th>Comparative sentence</th>
<th>Complex comparative sentence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eagles are large birds of prey.</td>
<td>Eagles are large birds of prey, but eagles are large and kestrels are small.</td>
<td>A main difference between eagles and kestrels is eagles are large birds of prey while kestrels are small birds of prey.</td>
<td></td>
</tr>
</tbody>
</table>

| Sentence frame with vocabulary removed | ____ are ____ and ____ are ____ are both ____ and ____ are ____. The main difference between ____ and ____ is ____ are ____ and ____ are ____. |
|---------------------------------------|---------------------------------------------------------------|------------------------------------------------------------------|---------------------------------------------------------------|
### Sentence Frames for Comparison

<table>
<thead>
<tr>
<th>Sentence frame with vocabulary underlined</th>
<th>Simple sentence</th>
<th>Comparative sentence</th>
<th>Complex comparative sentence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tornados are violent storms that begin on land. Hurricanes are violent storms that begin over the ocean.</td>
<td>Tornados and hurricanes are both violent storms, but tornados begin over land and hurricanes begin over the ocean.</td>
<td>A main difference between tornados and hurricanes is tornados are violent storms that begin over land in the US Midwest while hurricanes are violent storms that begin over the ocean south of Florida.</td>
<td></td>
</tr>
</tbody>
</table>

| Sentence frame with vocabulary removed | ___ are ___ that ______. ___ are ___ that _____. | ___ and ___ are both ____, but ___ begin _______ and ___ begin _______. | The main difference between ___ and ___ is ___ are ___ that _____. while ___ are ____ that _____. |

### Syntactic Patterns

<table>
<thead>
<tr>
<th>Somebody</th>
<th>Wanted/Because</th>
<th>But</th>
<th>So</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abolitionists</td>
<td>wanted to help slaves from the South escape to the North because they wanted them to live free</td>
<td>many slaves who escaped were caught, beaten or whipped, and some were murdered</td>
<td>so the abolitionists organized the Underground Railroad, an escape route with safe houses where slaves could hide on their way to Canada</td>
</tr>
<tr>
<td>Martin Luther King</td>
<td>wanted to end racial segregation and discrimination because Blacks were not treated fairly</td>
<td>he did not want to do this in a violent way</td>
<td>he used disobedience such as having people boycott riding buses</td>
</tr>
</tbody>
</table>
Sentence Frames

Video 5

Academic Language
Organization Structures

• Rhetorical structures
  – Exposition/informational
  – Argumentation/persuasion

• Text structures
  – Description
  – Sequence
  – Comparison-contrast
  – Cause-effect
  – Problem-solution
  – Enumeration

<table>
<thead>
<tr>
<th>Structure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>A topic or concept is described by referring to its characteristics, features or attributes. For example, a descriptive text could be a book on animal camouflage (the kinds of animals that use camouflage, where they live, how they look, when they use camouflage) or it could be a newspaper article describing a person (a physical description of the person's appearance, where and when the person lived, what the person does or did that makes the person memorable).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Structure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sequence</td>
<td>Items or events are listed in a chronological order. A text could give instructional procedures (e.g., how to make a kite) or relate a time-ordered series of events (e.g., from frogs laying eggs, to tadpoles emerging from the eggs, to tadpoles changing into frogs).</td>
</tr>
</tbody>
</table>

- Harriet Tubman
Structure Description
Comparison How things, concepts, ideas or events are similar or different are presented. For example, a compare/contrast text could consider similarities and differences among animals in preparation for deciding what pet to buy; or it could compare cultural variations of Cinderella.

<table>
<thead>
<tr>
<th>Cinderella Variants</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Version/country</strong></td>
</tr>
<tr>
<td>French</td>
</tr>
<tr>
<td>Italian</td>
</tr>
<tr>
<td>Korean</td>
</tr>
<tr>
<td>Egyptian</td>
</tr>
<tr>
<td>Chinese</td>
</tr>
<tr>
<td>Magic Eggs (Southern)</td>
</tr>
<tr>
<td>Turkey Girl (Zuni)</td>
</tr>
<tr>
<td>Golden Slippers (Vietnamese)</td>
</tr>
<tr>
<td>Cinder Edna (modern)</td>
</tr>
<tr>
<td>Structure</td>
</tr>
<tr>
<td>--------------</td>
</tr>
<tr>
<td>Causation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Structure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem/</td>
<td>The main ideas are organized into two possibilities: a) a problem and one or more proposed or known solutions or b) a question and its answer. For example, troubleshooting manuals present problems and possible solutions (e.g., the problem is the game box doesn't work and proposed solutions are to check the power cord and connections); and scientific articles raise a question or problem and then seek to give an answer or solution (e.g., germs and illness are problems while washing hands and vaccinations are solutions).</td>
</tr>
<tr>
<td>Solution</td>
<td></td>
</tr>
</tbody>
</table>

- Display remains black or blank
- Touch screen not responding
- Application unexpectedly closes or freezes
<table>
<thead>
<tr>
<th>Structure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enumeration</td>
<td>Things, ideas, or events are related by listing them together as a string of co-occurring items or with linking words like first, second, and, another. Enumeration can occur within any of the other discourse structures. For example, a list of ingredients in recipes (a sequence text), a list of reasons for recycling trash (a problem-solution text), or a list of effects of the Civil War (a causation text).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Structure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argumentative/ Persuasive</td>
<td>Positions are presented with supports or reasons for the positions; often reasons that both support and do not support the position are stated; a final conclusion is given based on whether the reasons support or do not support the position. For example, a text might give reasons for having a pet or argue for what a community should do with trash. Argumentative texts can include elements of all the other informational text structures.</td>
</tr>
</tbody>
</table>


- Do the benefits of renting a pet outweigh the potential harm it can cause animals?
- Considering the possible benefits and risks, is becoming a vegetarian a smart decision?
- Should it be mandatory to get a license to be a parent?
### Perspectives on Pet Rental

<table>
<thead>
<tr>
<th>Perspective</th>
<th>View 1</th>
<th>View 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>General public</td>
<td>Pet rental services benefit people and animals so would be a good service to the community</td>
<td>Domesticated animals form attachments to people and short-term rentals would not allow this to happen</td>
</tr>
<tr>
<td>Parents</td>
<td>Parents could find out how invested a child is in really caring for an animal</td>
<td>Pet rental may be upsetting to children because they would get attached to the animal and would have to give it back</td>
</tr>
<tr>
<td>Animal activists</td>
<td>People who rent animals would give them more attention than people who take their pets for granted.</td>
<td>People who rent animals are thinking only of their pleasure, not the needs of the animals.</td>
</tr>
</tbody>
</table>

### Continuum of Discourse Skills

<table>
<thead>
<tr>
<th>Discourse</th>
<th>Characteristics</th>
</tr>
</thead>
</table>
| Conversations with descriptions or recordings | • Record or describe what is happening  
• Dialogue  
• Talk about familiar topics  
• Commenting on immediate context/events |
| Reports or accounts of past events  | • Narrating, relating what happened  
• Talk of past events that may be less familiar and more decontextualize  
• Serves as a bridge to more unfamiliar/abstract discourse |
| Informational discourse            | • Involves a generalization about objects, persons, events; generally what happens |
| Theoretical/argumentative discourse | • Relates what may, will, or could happen  
• Theoretical uses information from expository texts to generate or support hypotheses  
• Argumentative uses information to persuade |

The Universe of Discourse

Video 6

The Universe of Discourse

Video 7
Interactional Processes that Facilitate Informational Discourse Skills

• Explain and problem solve in immediate situations
  – **Explain the purpose for objects, machines, or actions**
    • Why we need to go to the store, why we look both ways when we cross the street
  – **Procedures while making and doing things**
    • How to make cookies; how to build a snowman; how to put a toy together when directions are lost
  – **Causes and effects of actions**
    • Why you can’t take something you want at the store; why school was cancelled because of the storm


---

Interactional Processes that Facilitate Informational Discourse Skills

• Elaborate and explain information in storybooks
  – **Comment on and explain ideas and relate story ideas to real life information**
  – **Describe what would happen in real life or why certain cause-effect relationships operate**
  – **Adult compares events in story to child’s experiences**


Interactional Processes that Facilitate Informational Discourse Skills

• Co-construct and reflect on past experiences (use mental state and emotional words when recalling and evaluating past experiences)
  – Helps develop autobiographical memory
  – Supports higher order language
  – Exposes children to abstract concepts and rare words


Interactional Processes that Facilitate Informational Discourse Skills

• Negotiate, persuade, and argue
  – Children and adults engage to make a point, assert a right, negotiate for possession

Facilitating Informational Discourse Skills in School

• Explaining and Problem Solving in Immediate Situations
  – Problem: Hamster not happy in cage, but not safe outside
  – Solution: Create a plan for a better cage
  – Conversation in immediate context designed to support decontextualized language use and model problem-solution structure

Video 8
Facilitating Informational Discourse Skills in School

• Explaining and Problem Solving in Immediate Situations
  – Problem: Hamster not happy in cage, but not safe outside
  – Solution: Create a plan for a better cage
  – Conversation in immediate context designed to support decontextualized language use and model problem-solution structure

  Video 9

Facilitating Informational Discourse Skills in School

• Explanations about stories or story events: Elaborating content
  – Activate background knowledge
    • Caring for animals and their habitats
    • Animals that live outside vs. inside
    • Sometime inside animals try to get out; and outside animals try to get in

  Mouse Mess by Linnea Riley
Facilitating Informational Discourse Skills in School

• Discussion about content: Imposing a structure -- organize discussions
  – **Compare/contrast of pets vs. wild animals**
    • Both search for food and need warm place to sleep
    • Pets lives inside; wild animals live outside
    • Friendly, unfriendly/fearful
  – **Compare/contrast fact with fantasy**
    • Mouse covering self with blanket vs. making a nest of leaves and grass
    • Mouse using a fork to rake up food vs. mouse holding food with paws to eat it
  – **Problem/solution related to having a mouse in the house**

Facilitating Informational Discourse Skills in School

• Decontextualized discourse: Narrating past experiences
  – **Discussing an experience of having a squirrel in the house**
    • How to solve the problem but not hurt the squirrel
  – **Ask students to share related experiences:** “Let’s talk about the problem we had finding an animal in the wrong place. What did you do to solve the problem?”
    • Finding an animal in a strange place
    • Finding a spider in the classroom
    • Helping or rescuing a lost or confused animal
Expository Discourse: Scaffolding Generalized Accounts

- Move from narrative about a specific squirrel getting in a house to a generalized discussion of squirrels that can organize this in different discourse structures
  - Description of characteristics
  - Sequence/procedure for removing unwanted animal
  - Cause-effect: What happens when animals aren’t where they should be
  - Problem-solution: Ways to get rid of an unwanted wild animal
    - Call forest service
    - Buy Have-a-Heart trap
    - Trap animal and release it far away

Argumentative Discourse: Providing Opportunities to Negotiate and Persuade

- Compare and contrast views of scientists who test new medicines on animals with views of animal rights activists
- Strategies for saving endangered animals
- Saving the Rio Grande silver minnow or giving farmers irrigation water
Frames for Argumentation in Science

- Making a claim
  - I observed -- when --.
  - I compared -- and --.
  - I noticed --, when --.
  - The effect of -- on -- is --.

- Providing evidence
  - The evidence I use to support -- is --.
  - I believe -- (statement) because --.
  - I know that -- is -- because --.
  - Based on --, I think --.
  - Based upon --, my hypothesis is --.


Frames for Argumentation in Science

- Asking for evidence
  - I have a question about --.
  - Does -- have more --?
  - What causes -- to --?
  - Can you show me where you found the information about --?

- Offering a counter-claim
  - I disagree with -- because --.
  - The reason I believe -- is --.
  - The facts that support my idea are --.
  - In my opinion --.
  - One difference between my idea and yours is --.

Frames for Argumentation in Science

• Inviting speculation
  – I wonder what would happen if --.
  – I have a question about --.
  – Let's find out how we can test these samples for --.
  – We want to test -- to find out if --.
  – If I change --, (variable in experiment) then I think -- will happen, because --.
  – I wonder why --?
  – What caused --?
  – How would this be different if --?
  – What do you think will happen if / -- next?

• Reaching consensus
  – I agree with -- because --.
  – How would this be different if --?
  – We all have the same idea about --.


Intervention: Supporting Expository Text Comprehension and Production

• Discuss/elaborate written expository texts
  – Relate known to unknown
    • Why parents keep chemical/cleaning supplies out of reach of young children

Book
*Falcons Nest on Skyscrapers*
By Priscilla Belz Jenkins
Illustrated by Megan Lloyd
Birds such as falcons, eagles, hawks, owls, and vultures are called birds of prey because they eat other birds and small animals. They help to keep pigeons, mice, and other small animals from becoming too plentiful. No other creature can match a falcon's agility and remarkable powers of hearing and sight when it hunts. A falcon's body is designed for speed, and its aim is perfect.

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Small Common Birds (e.g., sparrows, robins, swallows, chickadees)</th>
<th>Large hunting birds (e.g., hawks, eagles, owls, falcons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reproduction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Intervention: Supporting Expository Text Comprehension and Production**

- Discuss/elaborate written expository texts
  - Modify complexity and unpack content

Falcon researchers working at the special laboratory called The Hawk Barn were determined to save the peregrine falcon. They collected young peregrines from the wild and raised them in their lab. These birds mated and laid eggs. After the eggs hatched, the scientists taught the nestlings how to survive in the wild. Then they put name bands around the legs of each bird and let them go.

  **Problem:** Threat to falcon population  
  **Solution:** Arranged for a few falcons to live in lab closely matched to natural environment

  **Another problem:** Baby birds protected from birth couldn't survive in wild  
  **Solution:** Teach the baby falcons how to survive in wild

Intervention: Supporting Expository Text Comprehension and Production

- Discuss/elaborate written expository texts
  - Make connections between ideas
    - Help students process connectives in oral medium with stress, intonation, pausing, or gestures

Not long ago, peregrine falcons lived practically all over the world. But in the 1950s, they began to disappear very rapidly. No one knew why. Bird experts, or ornithologists, were alarmed. Something had to be done quickly, or the peregrines would become extinct.

Ornithologists began to solve the mystery by carefully watching falcons at their nests. They saw that when a mother peregrine sat on her eggs to keep them warm, they broke. Why would this happen? After much searching, they found the answer: A poison known as DDT.

Causal connections between the birds’ plight and the people’s reactions are not stated with conjunctions.

Words such as because, so, therefore, as a result are missing in places where there is implied causality

Because the peregrines were becoming extinct, ornithologists had to figure out what was wrong and come up with a solution.
Intervention: Supporting Expository Text Comprehension and Production

- Discuss/elaborate written expository texts
  - Identify or call attention to text structure

Description

Birds such as falcons, eagles, hawks, owls, and vultures are called birds of prey because they eat other birds and small animals. They help to keep pigeons, mice, and other small animals from becoming too plentiful.

No other creature can match a falcon's agility and remarkable powers of hearing and sight when it hunts. A falcon's body is designed for speed, and its aim is perfect.

Sequence

When a falcon hunts, first it targets a moving victim, often a flying pigeon, one of its favorite foods.

Suddenly the falcon aims and dives straight down at 200 miles per hour! This dive is called a stoop. After striking its prey, the falcon circles back, grabs the falling victim with hook-like talons, and carries it off to eat. The entire capture takes less than a minute.

• In giving oral preview for cause-effect part of text, SLP might say, “We'll learn why the falcons dwindled and what caused their numbers to decrease – what caused the baby birds not to live.
Cause-Effect

DDT was sprayed on crops to kill the insects that ate them. The poison was supposed to be just strong enough to kill insects but not strong enough to harm other creatures. But birds ate the poisoned insects. The DDT did not kill the birds or the peregrines. But it did have another effect on them.

The DDT made the peregrines’ eggshells too thin. When the mother falcons sat on them, they broke. No baby falcons, or eyasses, could hatch.

People in the United States stopped using DDT when they realized what it was doing to wildlife. But by then, the peregrine was nearing extinction.


Add in Connectors

- *Because* the farmers wanted to stop bugs from eating their crops, they sprayed them with pesticides (poisons to kill bugs); and, *as a result*, when the bugs ate the poisoned plants, that *made (or caused)* them to become poisonous; *so (or therefore)* when the birds ate the bugs, the birds got poison in their bodies; *therefore* when the falcons ate those smaller birds the poison got into the falcons’ bodies and harmed their eggs -- it *caused* the eggshells to be thin and weak; *so that (because of this)* when the mother sat on them the eggs broke before the babies inside were big enough to survive.
One of the birds landed on a ledge of Baltimore’s tallest office building. No one there knew what kind of bird she was. She was much larger and looked very different from other birds. She bowed and screeched ghe, ghe, ghe at her reflection in the windows. Then she sat and dozed for days with her feathers fluffed. Some thought she was sick and asked an ornithologist for help.

The ornithologist recognized the bird as a peregrine falcon and saw the name bands she wore around each leg. He knew the scientist who had raised her at The Hawk Barn. The bird’s name was Scarlett. She was not sick. It was almost spring, so she wanted to find a mate and start a family.


Falcon researchers working at a special laboratory called The Hawk Barn were determined to save the peregrine falcon. They collected young peregrines from the wild and raised them in their lab. These birds mated and laid eggs. After the eggs hatched, the scientists taught the nestlings how to survive in the wild. Then they put name bands around the legs of each bird and let them go.

Graphically Represent Texts

- Co-construct a representation
- Add and highlight signal words
- Talk through the content from a graphic organizer


Cause-Effect Structure


**Problem-Solution Structure**

**Common Core Standards**

<table>
<thead>
<tr>
<th>Fifth Grade Competencies</th>
<th>Informational Discourse Foundations</th>
</tr>
</thead>
</table>
| Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text | • Familiarity with text concepts  
• Use a graphic organizer to retell an expository text |
| Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text | • Signal words  
• Connective words  
• Dependent clauses |
| Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade topic or subject area | • Talk about the non-immediate  
• Disciplinary vocabulary  
• Nominalization |
| Compare and contrast the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in two or more texts | • Engage in varied informational discourse functions in conversations in immediate and non-immediate situations |
Narratives are the dessert of the world. They are generally read for enjoyment.

Expository/informational text is the meat and potatoes of the world. It is through expository/informational texts that we gain much of our academic knowledge.


---

**Nancy McKinley Lecture Series**

**Developing Language in Elementary Students: What’s New?**

**Guest Editor:** Linda Schreiber, M.S., CCC-SLP, BRS-CL

**Mon. 10/7**

Informational Discourse: Teaching the Main Course of Schooling  
*Carol Westby, Ph.D., CCC-SLP*

**Tues. 10/8**

Co-morbidity of (C)APD with AD/HD, Language, and Reading Disorders  
*Donna Geffner, Ph.D., CCC-SLP/A*

**Wed. 10/9**

Contextualized Language Intervention and the Common Core  
*Teresa Ukrainetz, Ph.D., S-LP(C)*

**Thur. 10/10**

Teaching Social Problem Decision Making to Students with Social Skill Deficits  
*Kristine Noel, Ph.D., CCC-SLP*

**Fri. 10/11**

The iPad® and Elementary Students with Language Disorders  
*Angela Sterling-Orth, M.S., CCC-SLP*